REMARKS/ARGUMENTS

This Amendment is submitted in response to the Office Action mailed August 30, 2007. This amendment is being filed with a Request for Continued Examination.

I. Formal Interview Request

Applicant's undersigned representative hereby requests an in-person interview with the Examiner prior to issuance of a new office action. **The Examiner is requested to call Applicant's undersigned representative at 732-542-9070 to schedule the interview** in sufficient time for the interview to be conducted prior to the Examiner issuing a new office action. Applicant's representative intends for this amendment and remarks included herein to serve as an interview outline for the interview to be scheduled.

II. Introduction

New claims 52-57 have been added to add claims in various formats and to add additional dependent claims directed to various features and embodiments described in the application. Accordingly, claims 1-19, 27-34 and 46-57 are now pending in the application. Claims 1-19, 27-34 and 46-51 are rejected.

As will be discussed below, none of the pending claims are anticipated or rendered obvious by the applied references.

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III. <u>The Claim Rejections Should Be Withdrawn</u>

Applicant's representative notes that with regard to the rejections set forth in the Office Action they appear to be an identical copy of the rejections from the previous office action but for the discussion of claims 46-51. Accordingly, the arguments made in the previous response are equally applicable to the current rejections. The rejections of claims 46-51 should be withdrawn for the same or similar reasons that the rejections of all the previously pending claims should be withdrawn. These reasons are repeated below for the sake of having a complete document to use as the basis for the discussions during the requested interview.

In addition to repeating the previous arguments in Section IV of this response, Applicants will address various issues raised in the Examiner's response to Applicant's previous arguments.

Applicant notes however that it was hoped the Examiner .ld have clarified the rejections and not merely esponded in a separate section to Applicant's arguments while repeating the previous rejections without addressing the problems noted by Applicants in Applicant's last response, e.g., identifying two different elements: i) a Base station 256 and ii) an MSC 254, as corresponding to a single node in the applied reference.

As will be discussed below, in the repeated rejection of the claims the Examiner continues cite two different nodes, a base station 256 and MSC 254 as corresponding to a single node. This seems inconsistent with the Examiner's identification of **simply the base station 256** as

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corresponding to the "access node" recited in claim 1 in the Examiner's response to Applicant's request for clarification.

1. **Discussion of the Examiner's Response to Arguments Regarding the Rejection of Claim 1 and the Clarification Provided that the Access Node of Claim 1 is interpreted as <u>corresponding the Base Station 256</u>**

Applicant will now address the Examiner's response to Applicant's Arguments made with regard to claim 1 and the request for clarification of the rejection.

With regard to claim 1 Applicants previously argued:

> Applicants note that in the rejection of claim 1, **the Examiner relies on a combination of two distinct nodes, base station 256, and MSC 254 as corresponding to the recited access node** and proceeds to cite text discussing functions which are mostly performed by the MSC 254 **NOT** the base station 256. Applicants note that the MSC 254 is <u>NOT</u> an access node and that **the Examiner's citing of functionality performed by <u>two different</u> nodes in no way anticipates operating "an access node"**, which is one node NOT two, to perform the recited operations as recited in claim 1.

In addition, in the last response Applicant sought clarification of the Rejection of Claim 1 stating:

> In the event the Examiner intends to persist in the rejection of any of the pending claims based on the <u>Sanmugan</u> reference **Applicants respectfully request that the Examiner clarify precisely what "node" in the applied reference the Examiner considers to be the recited "access node: is it 1) the base station 256; 2) the MSC 254;

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or 3) that the MSC and base station 256 in
the applied reference are a single node
which is an access node.

In response to Applicants arguments and request for
clarification the Examiner states:

> In particular, **Sanmugam discloses the
> feature(s) operating an access node (e.g.,
> BS 256)** to receive a data message (e.g.,
> page requests) directed to a mobile station
> (M1) which reads on the claimed "end node"
> (see col. 13, lines 1-32; col. 7, lines 8-
> 15; col. 8, line 1-9; col. 9, line 2; Figs.
> 9, 8A-B), where page requests are based on
> paging information such as class of service,
> paging parameters, paging field, paging
> characteristics, and paging extent; and
> operating the access node (e.g., 256) to
> determine from said received paging
> requirement using packet classification
> based on a header field included in said
> data message (see col. 13, lines 1-32; col.
> 7, lines 8-15; col. 8, line 1-9; col. 9,
> line 2; Figs. 9, 8A-B), where page requests
> are based on paging information such as
> class of service, paging parameters, paging
> field, paging characteristics and paging
> extent in which a header field would be
> inherent due to paging information of the
> paging requests as evidenced by the fact
> that one of ordinary skill in the art would
> clearly recognize. In addition, paging
> orders are transmitted towards the base
> station **(e.g., 256)** and places the page
> message(s) in buffers of the base stations
> in which the page message(s) are transmitted
> according to paging priorities are in order
> to allocate resources to distribute the
> paging messages appropriately. Therefore,
> the reference Sanmugam as well as
> combinations of the other applied
> reference(s) more than adequately meets the
> claim limitations. (office action Pages 16-
> 17 bold added)

Applicant thanks the Examiner for clarifying that
the rejection is based <u>on Base Station 256</u> being

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interpreted as the access node recited in claim 1.
Applicant notes that given the Examiner's interpretation
that the **Base Station 256** and **NOT the MSC 254** is to be
interpreted as the Access node of claim 1 it becomes clear
that the rejection of claim 1 and the various other claims
should be withdrawn. As previously noted the Examiner
cites and relies on functionality which is performed in
many cases not by the base station 256 but by the MSC 254
or other nodes in the applied reference. **If the Examiner
were to revise the rejection of claim 1 and remove all
references to the MSC 254 of the applied reference** (or
rewrite it removing references to the BS 256 and rely on
the MSC as the access node) **and limit the cited
functionality to what is performed by a single node, e.g.,
the base station 256, it would be clear that the rejection
of claim 1 can not be supported.**

In support of the rejection of claim 1, the Examiner
in the response cites various portions of the applied
reference. Applicants note that the majority of the
sections cited by the Examiner do not discuss operations
performed by the Base Station 256 but rather by other
elements in the system. Applicants will be prepared during
the interview to discuss the cited portions of the
reference and which functions cited by the Examiner are
performed by the MSC 254 or some other element and which
limited set of functions are actually performed by the Base
Station 256 upon which the Examiner relies as corresponding
to the "access node" of claim 1.

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**2.   Discussion of the Examiner's Response to
Applicant's Request for Clarification
Regarding the Rejection of Claim 5**

In order to further highlight the Examiner's
inconsistency in the rejections, i.e., the Examiner mixing
and matching of references to the base station 256 and MSC
254 when asserting that the reference shows the recited
claimed features which are directed to operating "an access
node" Applicants sought clarification of the rejection of
claim 5 if it was going to be maintained.

> In the previous and current office actions the
> Examiner states:
>
>> Regarding claim 5, Sanmugam discloses the
>> he [sic] method of claim 2, further
>> comprising:
>> operating **said access node (e.g., 254,
>> 256) to communicate a paging signal to a
>> second node (e.g., base station 256)** …

Applicants note that the Examiner refers in the
rejection to said access node (e.g., **254**, 256). The
Examiner however has clarified the rejection to indicate
that "said access node" is to be interpreted as **the base
station 256 NOT the MSC 254.** Applicant wants to point out
the problem the Examiner now encounters. Assuming "said
access node" is the base station 256 it should be apparent
that "said access node" i.e., the base station 256 as
indicated by the Examiner is NOT also "a second node" it
would be the same node.

The Examiner's response seems to indicate some
confusion with regard to the application and claim and
fails to address the problem in the Examiner's application
of the Sanmugam patent to claim 5, i.e. that the Examiner
interprets the access node as being the base station 256

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(**NOT the MSC 254**) and also as the second node recited in claim 5.

With regard to Applicants request for clarification with regard to claim 5 the Examiner states:

> In response to applicant's argument of claim 5 on pg. 17, section II.B, 2nd paragraph (also, see Figs. 10A 'ref.1022', 10B 'ref.1030'), "...to argue with respect to the same claim that it is a *second node* to which the access node communicates a signal...", the Examiner respectfully disagrees. According to language of the instant application on pg.33, 2nd full paragraph, recites "...another node, e.g., a **second node** which **may be an access node**...a **second** node, **e.g.,** access **node**..." which broadly describes a second node that **may be** an access node and corresponds to the language used in claim 5. The language of the instant application provides reasoning for the rejection to apply base station (e.g., 256) as the second node since the second node may be an access node. In addition, the instant application (see pg. 33, 2nd full paragraph) recites "...node, e.g., **a *core node***, is responsible for allocating paging resources in accordance with the determined **requirements** but **another node**, e.g., **second node** which may be an **access node** is responsible for transmitting the page..." which describes the core node NOT an access node to communicate the second node as claimed in claim 5. Therefore, in view of the above, the rejection is consistent with the language of the instant application.

From the Examiner's citation to portions of Applicant's specification it seems the Examiner is confused. Applicants do not dispute that the second node recited in claim 5 can be another access node, e.g., base station. The problem is not with Applicant's claim or specification but with the Examiner's interpretation as the

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same element corresponding to different nodes in the claim.
The Examiner confuses the issue even further by discussing
a **core node in Applicants specification.** The Exmaminer
asserts in the rejection that "said access node" is the
base station 256 NOT a core node. In the rejection of
claim 5 the Examiner also asserts that the second node is
the base station 256. The base station 256 is not a core
node. Is the Examiner asserting that the base station 256
but some other element should be interpreted with regard to
claim 5 as the access node. Is the Examiner asserting that
the "second node" in the rejection should not be
interpreted as the "base station 256" as indicated in the
rejection of claim 5? Applicants note that new claim 57
has been added and indicates that the second node of claim
5 is "**a second base station**". Thus with regard to new
claim 57 both the access node and the second node are base
stations.

Applicants request that the Examiner withdraw the
rejection of claim 5 or clarify the rejection of claim 5 to
indicate a single node the Examiner considers to correspond
to i) said node and a single node the Examiner asserts
corresponds to ii) said second node.

IV. The Pending Claims Are Patentable

1. The Pending Claims Are Not Anticipated Or Rendered Obvious by the Sanmugam Patent

In the Office Action the Examiner rejected claims 1-3
and 5-34 as being anticipated by the Sanmugam patent.

None of the pending claims are anticipated or rendered
obvious by the Sanmugam patent. This is because the
reference fails to disclose a method wherein **an access**

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node, e.g., a base station, performs the steps recited in claim 1. It also fails to disclose a base station which has the elements recited in claim 27.

As will be discussed below, the rejection is based on a misinterpretation of the applied reference. The error in the Examiner's interpretation is apparent from a review of the reference and the discussion of the dependent claims in which the Examiner interprets elements of the applied reference differently than when applying the reference to the independent claim from which the dependent claim depends. Given the inconsistency of the interpretation, at a minimum, either the rejection of the impendent claims is wrong or the rejection of the dependent claims is wrong. However, as will be discussed below, none of the claims are anticipated or obvious in view of the applied reference and all the rejections should be withdrawn.

A.   The Applied Reference Does Not Anticipate or Render Obvious the Present Invention

The _Sanmugam_ patent describes a system which uses a centralized paging system where the prioritization of incoming page requests occur in various elements outside of an access node, e.g., in core network nodes 250, 252, 253, with the paging request then being sent to and queued in a mobile switching center (MSC) 254 (see figures 1 and 9). The MSC 254 then sends page orders (see col. 12, lines 29-42) including previously determined paging priorities to base stations 256. The base stations 256 then transmit page massages in accordance with the previously determined priorities which were determined by one or more entities outside the base station. (See columns 12 and 13.)

The _Sanmugam_ patent is based on receiving and processing of explicit incoming page requests received by various _core network elements_. This is in sharp contrast to various methods and apparatus of the present invention,

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such as the method of claim 1, *which are directed to the receipt, at an access node,* of a data message directed to an end node and determining a paging requirement using packet classification based on a header field included in the data message.

Various embodiments of the present invention are also directed to other novel features. Such features provide access nodes, e.g., base stations, flexibility in determining resource allocation with regard to paging operations, e.g., with respect to generating pages in response to received data messages, paging information or paging requests.

The access node based paging control embodiments of the present invention are in sharp contrast to a case where paging decisions and determinations are handled in one or more core network nodes as is the case in the Sanmugam patent. An access node, which normally has more current information about limited airlink and other resources at the access node which may change in relatively short order in the case of wireless links, has the advantage of being able to use such current information in making paging resource allocation decisions and/or in priortizing paging requests. Such an access node based approach to paging control differs sharply from the centralized core based approach to paging taught by the Sanmugam patent.

B. The Rejection of the Claims is Based on a Missinterpretation of the Sanmugam patent and Should Be Withdrawn

The Examiner's interpretation of the Sanmugam patent serves as the basis of all the rejections including the obviousness rejection of claim 4. Accordingly, by addressing the Examiner's interpretation of the Sanmugam patent Applicants will address and overcome all the rejections.

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A review of claims 1, 2, and 5 and the Examiner's application of the reference to these claims shows some of the error's and inconsistencies with regard to the Examiner's interpretation of the reference. As discussed below the applied reference does not anticipate the claims when properly interpreted.

Claim 1 recites:

A communications method, the method comprising:
operating an access node to receive a data message directed to an end node; and
operating the access node to determine a paging requirement using packet classification based on a header field included in said data message.

Claim 2 recites, in pertinent part:

The method of claim 1,
… wherein **said access node is a base station**, the method further comprising:
operating said **access node to allocate a paging transmission resource** for transmitting a page as a function of the determined paging requirement … .

Claim 5 recites:

The method of claim 2, further comprising:
operating said access node to communicate a paging signal to a second node, indicating allocation of a paging transmission resource for use in transmitting a page corresponding to said received data message.

In rejecting the claims the Examiner states:

Regarding claim 1, Sanmugam discloses a communications [system] (see col. 4, lines 56-64; Figs. 1,9), the method comprising:
operating **an access node (e.g., BS 256; MSC 254)** to receive a data message (e.g., page

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requests) directed to a mobile station (M1)
which reads on the claimed "end node" (see
col. 13, lines 1-32; col. 7, lines 8-15, col.
8, line 1-9; col. 9, line 2; Figs. 9, 8A-B),
where page requests are based on paging
information such as class of service, paging
parameters, paging field, paging
chracteristics, and paging extent; and
     **operating the access node (e.g., 256;
254)** to determine from said received paging
requirement using packet classification based
on a header field included in said data
message (see col. 13, lines 1-32; col. 7,
lines 8-15; col. 8, lines 1-9; col. 9, line 2;
Figs. 9, 8A-B) where page requests are based
on paging information such as class of
service, paging parameters, paging field,
paging characteristics, and paging extent in
which a header field would be inherent due to
paging information of the paging requests as
evidenced by the fact that one of ordinary
skill in the art would clearly recognize.

     Applicants note that in the rejection of claim 1,
**the Examiner relies on a combination of two distinct nodes,
base station 256, and MSC 254 as corresponding to the
recited access node** and proceeds to cite text discussing
functions which are mostly performed by the MSC 254 **NOT** the
base station 256. Applicants note that the MSC 254 is <u>NOT</u>
an access node and that **the Examiner's citing of
functionality performed by <u>two different</u> nodes in no way
anticipates operating "an access node"**, which is one node
NOT two, to perform the recited operations as recited in
claim 1.

     The error in the Examiner's interpretation which
equates two different nodes to "an access node" becomes
even clearer when the Examiner's rejection of claim 2 is
reviewed. Claim 2 recites, in part, "wherein **said access
node is a base station**". In rejecting claim 2, which
depends from claim 1, the Examiner states "Sanmugam

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discloses the method of claim 1 ... **wherein said access node (256) is a base station (256)**, further comprising: **operating** said first node [sic - should be access node] (e.g., **MSC 254**) to allocate ...

The Examiner makes it clear that in the rejection of claim 2 the base station (256) is considered to be the access node. However, when it comes time to indicate the function performed by the "access node" the Examiner refers not to an operation performed by the base station but to MSC 254, <u>a different node</u>. It is clearly inconsistent to interpret the base station 256 as the "access node" and then refer to the operation of the MSC 254 instead of the element 256 identified as the "access node".

The error in the Examiner's interpretation is extended to the rejection of the other claims. Consider for example the rejection of claim 5 which depends from claim 2. In rejecting claim 5 the Examiner states:

> Regarding claim 5, Sanmugam discloses the he [sic] method of claim 2, further comprising:
> operating **said access node (e.g., 254, 256) to communicate a paging signal to a second node (e.g., base station 256)** ...

As can be seen in claim 5, the Examiner is equating the **base station 256 to being the access node** and also "a second node" to which the access node communicates a paging signal. If the base station 256 is the access node then <u>it is inconsistent</u> for the Examiner to argue with respect to the same claim that it is "a second node" to which the access node communicates a signal.

As stated above, **Applicants respectfully submit that the MSC 254 is not an "access node", e.g., base station,**

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and that the base station 256 of the Sanmugan patent does
not perform the steps recited in independent method claim 1
nor does it include the elements recited in independent
claim 27. Accordingly, the rejection of claims 1 and
claims 3-26 which depend therefrom should be withdrawn. In
addition the rejection of independent claim 27 along with
claims 28-34 which depend therefrom should be withdrawn for
the same or similar reasons.

The pending claims, including the new claims are
patentable because the applied reference does not show the
features recited in claim 1 or the other claims as asserted
by the Examiner. Accordingly, the rejection of the claims
should be withdrawn.

V. Conclusion

     Applicant's representative looks forward to
discussing the prior art and pending claims with the
Examiner during the interview which is to be scheduled.

     In view of the foregoing amendments and remarks,
it is respectfully submitted that the pending claims are in
condition for allowance. Accordingly, it is requested that
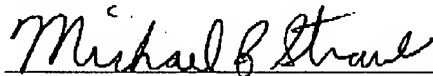the Examiner pass this application to issue.

     To the extent necessary, a petition for extension of
time under 37 C.F.R. 1.136 is hereby made and any required
fee in regard to the extension or this amendment is
authorized to be charged to the deposit account of Straub &
Pokotylo, deposit account number 50-1049.

     None of the statements or discussion made herein are
intended to be an admission that any of the applied
references are prior art to the present application and

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Applicants preserve the right to establish that one or more of the applied references are not prior art.

Respectfully submitted,

October 31, 2007

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patent Office on the date shown below.

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Michael P. Straub   October 31, 2007
Signature   Date